



BLUE ROCK
ENVIRONMENTAL, INC.

FILE COPY

Mr. Mark Verhey
Humboldt County Health Department
Division of Environmental Health
100 H Street, Suite 100
Eureka, California 95501

November 7, 2005

**Re: Summary of Site Conditions &
Workplan for Well Destruction and Installation**
Former Totem Pole Market
580 South Fortuna Boulevard, Fortuna, CA
HCDEH LOP No. 12028
Blue Rock Project No. NC-40

Dear Mr. Verhey,

This document presents the summary of conditions and a workplan for the referenced project at 580 South Fortuna Boulevard, Fortuna, Humboldt County, California (site) (Figure 1), and it was prepared for Valerie Ellis by Blue Rock Environmental, Inc. (Blue Rock). The Humboldt County Division of Environmental Health (HCDEH) requested a summary of site conditions and recommendations for further work in a letter dated September 12, 2005.

Background

Site Description

The former Totem Pole Market is located on the corner of South Fortuna Boulevard and First Street in Fortuna, California. The site is located in an area of low topographic relief and is considered part of the Eel River flood plain (Figure 1). The site contains one single-story building. The site formerly contained two 1,000-gallon gasoline and one 550-gallon used oil underground storage tanks (USTs) (Figure 2).

UST Removal & Overexcavation

In 1977, Beacom Construction (Beacom) of Fortuna, California, on behalf of Mr. Marvin Fork, closed the two 1,000 gallon USTs in place by filling with a cement slurry under regulations of the time. In 1988, an Unauthorized Release Form was filed by Mr. Fork with Humboldt County. In 1990, LACO Associates (LACO) was retained to evaluate the site for possible overexcavation. LACO subsequently supervised the excavation of three test pits to determine the feasibility of overexcavation.

In March 1994, the two 1,000-gallon gasoline USTs were removed by Haberstock Construction. At this time a third 550-gallon used oil UST was discovered and removed. The three USTs were transported to Erickson Inc of Richmond, California. Following UST removal, approximately 180 cubic yards of petroleum hydrocarbon impacted soil was overexcavated and disposed of at B&J landfill in Vacaville, California.

Site Investigation History

Subsurface investigation activities have been ongoing at the site since 1995. A total of approximately 27 soil borings have been drilled and six monitoring wells (MW-1 through MW-3, MW-4S, MW-4D and MW-5D) have been installed at the site (Figure 2). Groundwater monitoring has been ongoing since the wells were installed. Based on site assessment performed to date, including soil and groundwater sampling from temporary soil borings and monitoring wells, the lateral and vertical extent of petroleum hydrocarbon impact to soil and groundwater associated with the subject release has been delineated. Well construction data are summarized in Table 1. Soil and groundwater sample data are summarized on Tables 2, 3, and 4, respectively.

Summary of Hydrogeology

The following summary of site hydrogeology was obtained from historical boring logs and cross-section construction. The first couple feet below grade consists of baserock fill. From about 2 to 13 feet bgs, a clayey silt or silty clay (CL-ML) appears to be present. Interbedded silt (ML), sand (SM-SC), and gravel (GM) have been observed from about 13 to 20 feet bgs (the maximum depth explored at the site). Free water has been historically observed in temporary borings at depths ranging from approximately 2 to 17 feet bgs. Results of the installation of wells MW-4S (screened 4-9 feet bgs) and MW-4D (screened 13-18 feet bgs) confirmed the presence of two water bearing zones. Groundwater levels have been approximately 8 feet higher in MW-4S than in MW-4D. This suggests a downward migration of water between the two zones. It appears MW-1, MW-2, and MW-3 are screened across the two water bearing zones (these wells are screened from 5-15 feet bgs). The direction of lateral groundwater flow in either zone has not been well evaluated due to the fact that insufficient numbers of properly screened wells (i.e. a minimum of three wells) exist at the site to perform such an evaluation. The distribution of both sorbed- and dissolved-phase contamination suggests a northwesterly direction of contaminant migration. Local topography suggests that groundwater flow should be west to northwest. Cross-sections are shown on Figures 3a and 3b.

Summary of Contaminant Type

The predominant contaminant types that have been detected in the subsurface include total petroleum hydrocarbons as gasoline (TPHg), benzene, toluene, ethylbenzene, and xylenes (BTEX), and the fuel oxygenates MTBE, TBA, ETBE, and TAME. TPH as diesel (TPHd) has also been detected, but at lower levels.

Distribution of Gasoline Impacts in Soil

The residual sorbed-phase gasoline plume appears to be delineated. It is generally located at a depth of approximately 3 to 10 feet bgs, with the highest levels of TPHg remaining along the western side of the excavations and extending north and west under 1st Street; however, the extent of the residual sorbed-phase plume does not appear to encroach onto adjoining properties. The maximum residual sorbed-phase TPHg concentration was detected along the western limit of the northern excavation at 4,600 mg/kg. Further excavation in that direction was unfeasible due to the location of the building. In their report dated June 2005, LACO estimated that a mass

of approximately 400 kg (880 lbs) of TPHg remained in the sorbed-phase. Figure 4 shows a map of residual soil contamination.

Distribution of Gasoline Impacts in Groundwater

The extent of dissolved-phase gasoline impacts appears to have been delineated by previous investigation efforts. The core of the plume appears to be centered at the northwest corner of the northern overexcavation pit, and it appears to extend into 1st Street. The maximum TPHg concentration in water was 14,000 µg/L observed at B3 (located approximately 20 feet northwest of the north excavation). The evaluation of the extent of the dissolved-phase plume is somewhat compromised by mixed data from different stratigraphic levels, as discussed in the Hydrogeology section above. A goal of the work proposed below will be to further evaluate dissolved-phase contaminant concentrations at previously identified water bearing zones. Figure 5 shows a map of recent quarterly groundwater monitoring results for wells at the site.

Sensitive Receptors

LACO previously identified and sampled approximately three private wells in the vicinity of the site (491 and 555 South Spring Street and 1702 1st Street). As of May 2001, samples from these wells were free of TPHd, TPHg, BTEX, and MTBE. An additional well ostensibly exists at 478 South Fortuna Boulevard, and Blue Rock is currently seeking access to sample that well. Table 5 summarizes sampling data from domestic wells.

Numerous utility corridors run along South Fortuna Boulevard and 1st Street. In their letter dated September 26, 2003, LACO determined that utility trenches in this area are filled with reused native material, and, therefore, due to the similarity in soil texture between the fill and surrounding materials, there were no preferential pathways associated with the utilities.

Proposed Scope of Work

The purpose of this phase of work is to further evaluate the shallow water bearing zone at approximately 4 to 9 feet bgs and the lower from approximately 14 to 20 feet bgs. Due to the fact that several of the monitoring wells at the site are screened across both intervals, it will be necessary to destroy some wells and install new wells. Only wells MW-4S (screen 4-9 feet bgs), MW-4D (screen 13-18 feet bgs), and MW-5D (screen 15-20 feet bgs) currently fit into the site hydrogeologic model. Wells MW-1, MW-2, and MW-3 are screened 5-15 feet bgs, and they appear to cross both water bearing zones.

Blue Rock proposes the following drilling program to address well construction concerns:

- **MW-1** (Screen 5 to 15 feet bgs): Destroy and replace as dual-completion well. Dissolved-phase gasoline contamination has been detected in this area. Therefore, monitoring wells in this location are needed.
- **MW-2** (Screen 5 to 15 feet bgs): Destroy and do not reinstall. This well has been essentially free of detectable gasoline contaminants since 1996. The fact that this well has been consistently clean suggests the delineation of the plume in both the shallow and lower water bearing zones, because if any contamination were present in either of these zones it would be indicated by detection of gasoline contaminants from a well screened across both zones.
- **MW-3** (Screen 5 to 15 feet bgs): Destroy and replace as dual-completion well. This well has been essentially free of detectable gasoline contaminants since 1996. However, elevated dissolved-phase gasoline concentrations were detected in B-3, located approximately 20 feet east of this well. Blue Rock recommends installation of a dual-completion well set in a location approximately 15 feet east of existing MW-1 for the purpose of locating a monitoring point at the apparent downgradient edge of the tank pit and to create a minimum number of wells (i.e. three), in both the shallow and lower water bearing zones, needed for calculation of groundwater flow direction and gradient.

The dual-completion wells will be installed in individual boreholes separately laterally by approximately 5 feet. The nested wells screens will be separated vertically by at least 5 feet, so that potential vertical gradients between the two zones can be evaluated. Proposed well locations are shown on Figure 6.

Pre-Field Activities

Prior to drilling, Blue Rock will prepare site specific Health and Safety Plan. Drilling permits will be obtained the HCDEH, and appropriate encroachment permits will be obtained from the City of Fortuna. Prior to conducting and drilling, the site will be marked by Underground Service Alert to identify utilities leading to the site. Additionally, a private utility locator may be employed to clear exact drilling locations.

Well Destruction (MW-1, MW-2, and MW-3)

A Blue Rock scientist, working under the supervision of a Blue Rock California Professional Geologist, will supervise all drilling and well installation/destruction activities. Drilling will be performed by a C-57 licensed driller using a truck-mounted rill-rig equipped with 8-inch diameter hollow-stem augers.

Prior to destruction, each well will be measured to verify the open depth of the casing. Each well will be destroyed by over-drilling. The wells will be over-drilled to the original depth, and casing materials will be recovered intact, if possible. The cuttings of annular material (grout, bentonite, and sand) will be stored on-site, in labeled, 55-gallon drums (pending off-site

disposal). The boreholes will be filled with cement grout to the surface, and the well box removed. The surface will be finished with material to match existing conditions.

Drilling, Sampling, and Installation of Dual-Completion Well Sets (MW-1S/D & MW-3S/D)

Drilling will be performed by a C-57 licensed driller using a truck-mounted rill-rig equipped with 8-inch diameter hollow-stem augers. During drilling, soil samples will be collected at five-foot intervals in a California Modified Split-Spoon sampler lined with clean, brass tubes. The Blue Rock scientist will log soil types in accordance with the Unified Soil Classification System. Additionally, soil samples will be screened for the presence of volatile petroleum hydrocarbon vapors with a photo-ionizing organic vapor meter (OVM).

Blue Rock proposes to collect approximately two soil samples from each drilling location for laboratory analysis. The purpose of this sampling will be to compare current soil contamination levels to those previously detected in these locations in 1996. It is likely that soil concentrations have diminished with time, and current data will provide for better calculation of the existing sorbed-phase mass remaining in-situ. The soil samples will be selected from the approximate 5 to 10 feet depth intervals. These samples will be covered with Teflon lined plastic caps, labeled, documented on a chain-of custody form, and placed on ice in a cooler for transport to the project laboratory.

Blue Rock will supervise construction of monitoring wells in the boreholes. Well screens will target two zones: the shallow wells will be screened from about 4 to 9 feet bgs, and the lower zone wells will be screened from about 14 to 19 feet bgs. The wells will be constructed of clean, flush-threaded, two-inch diameter PVC well materials. Well screen will consist of 0.01-inch slot. A filter pack of Lonestar #2/12 sand will extend from the bottom of each boring to one foot above the screened interval. The filter pack will be sealed by a one-foot layer of hydrated bentonite. The remaining annular space will be filled with cement and a tamper-resistant box will be concreted in place over the wellhead. Tentative well construction details are shown on Figure 7.

Well Development and Survey

The wells will be developed by surging and bailing no earlier than 72 hours following installation. Development will involve the removal of water from each well until such time that it is relatively free of sediment, and pH, temperature, and conductivity parameters have stabilized. It is anticipated that the water volume removed will not exceed 10 saturated casing volumes. The new wells and sampling points will be surveyed according to GeoTracker requirements.

Well Sampling

Following drilling and well installation activities, Blue Rock will incorporate the new wells into the existing quarterly groundwater monitoring program for the site.

Prior to purging or sampling, an electronic water level indicator accurate to within ± 0.01 -ft will be used to gauge depth to water in each well. All wells will also be checked for the presence of light non-aqueous phase liquids (LNAPLs) prior to sampling.

The wells will be purged of groundwater until such time that the parameters pH, temperature, and conductivity have stabilized. At a minimum, parameter measurements will be taken at every saturated well casing volume purged. A minimum of three saturated casing volumes will be purged, unless the well goes dry, but no more than five saturated casings volumes will be removed.

Following recovery of water columns to at least 80% of their static levels, or after passage of two hours (if designated recovery levels have not occurred), groundwater samples will be collected from the monitoring wells using polyethylene sampling bailers. Samples will be decanted into laboratory supplied containers, labeled, documented on a chain-of-custody form, and placed on ice in a cooler for transport to the project laboratory.

Soil and Groundwater Sample Analyses

The soil and groundwater samples will be analyzed by a California DHS-certified laboratory for:

- TPHd by EPA Method 8015M with silica-gel clean-up
- TPHg, BTEX, and MTBE by EPA Method 8260B

Decontamination and Management of Investigation Derived Soil and Water

Prior to, and between, use all downhole drilling and sampling equipment will either be steam-cleaned or washed in an Alconox® solution followed by double rinse in clean tap water. Soil cuttings and auger/sampler rinseate will be stored in labeled 55-gallon drums on-site pending appropriate disposal. Blue Rock will utilize the analytical results for soil and/or water samples collected from the borings to coordinate soil and water recycling/disposal.

Reporting

Blue Rock will prepare a report following this phase work. The report will include description of field and laboratory methods, results, discussion/interpretation, and recommendations, as conditions warrant. The report text will be supported by tabulated data and drawings. The report will be prepared under the supervision of, and signed by, a California Professional Geologist at Blue Rock. Blue Rock will also make appropriate uploads to GeoTracker, as required.

Groundwater Monitoring Program

The site is currently being monitored on a quarterly basis per the HCDEH directives. The next quarterly sampling event is scheduled for November 2005. The new wells will be matriculated into the program. Groundwater samples will be analyzed for TPHd, TPHg, BTEX, and MTBE. Blue Rock recommends that all newly installed wells be monitored for at least four consecutive quarters to determine potential trends in contaminant concentrations and groundwater elevations.

Certification

This report was prepared under the supervision of a California Professional Geologist at Blue Rock. All statements, conclusions, and recommendations are based upon published results from past consultants, field observations by Blue Rock, and analyses performed by a state-certified laboratory as they relate to the time, location, and depth of points sampled by Blue Rock. Interpretation of data, including spatial distribution and temporal trends, are based on commonly used geologic and scientific principles. It is possible that interpretations, conclusions, and recommendations presented in this report may change, as additional data become available and/or regulations change.

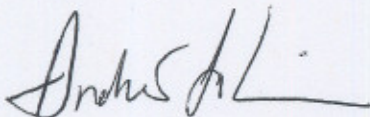
Information and interpretation presented herein are for the sole use of the client and regulating agency. The information and interpretation contained in this document should not be relied upon by a third party.

The service performed by Blue Rock has been conducted in a manner consistent with the level of care and skill ordinarily exercised by members of our profession currently practicing under similar conditions in the area of the site. No other warranty, expressed or implied, is made.

If you have any questions regarding this project, please contact us at (707) 441-1934.

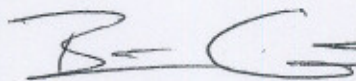
Sincerely,
Blue Rock Environmental, Inc.

Prepared by:

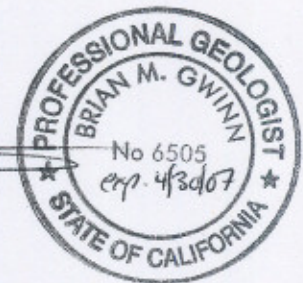


Andrew LoCicero
Project Scientist

Reviewed by:



Brian Gwinn, PG
Principal Geologist



Attachments:

- Table 1: Well Construction Details
- Table 2: Soil Analytical Data
- Table 3: Groundwater Elevations and Analytical Data
- Table 4: Grab Groundwater Analytical Data
- Table 4: Domestic Well Analytical Data
- Figure 1: Site Location Map
- Figure 2: Site Plan
- Figure 3a: A-A' Cross-Section
- Figure 3b: B-B' Cross-Section
- Figure 4: TPHg in Soil (~3-10 ft bgs)
- Figure 5: Groundwater Sample Results for Monitoring Wells (8/9/05)
- Figure 6: Proposed Well Installation & Well Destruction
- Figure 7: Proposed Well Construction Details

Distribution:

- Val Ellis, PO Box 378, Miranda, CA 95553

Table 1
WELL CONSTRUCTION DETAILS

Former Totem Pole Market
508 South Fortuna Boulevard
Fortuna, California
Blue Rock Project No. NC-40

Monitoring Well Identification	Date Installed	Installed by	Casing Diameter (inches)	Total Depth (feet)	Blank Interval (feet)	Screened Interval (feet)	Slot Size (inches)	Filter Pack (feet)	Bentonite Seal (feet)	Cement Grout (feet)
MW-1	6/25/96	Laco	2	15	0-5	5-15	0.01	4-15	2-4	0-2
MW-2	6/25/96	Laco	2	15	0-5	5-15	0.01	4-15	2-4	0-2
MW-3	6/25/96	Laco	2	15	0-5	5-15	0.01	4-15	2-4	0-2
MW-4S	2/5/05	Laco	2	9	0-4	4-9	0.01	3-9	1-3	0-1
MW-4D	2/5/05	Laco	2	18	0-13	13-18	0.01	12-18	10-12	0-10
MW-5D	2/5/05	Laco	2	20	0-15	15-20	0.01	14-20	12-14	0-12

Table 2
SOIL ANALYTICAL DATA
Former Totem Pole Market
580 South Fortuna Boulevard
Fortuna, California
Blue Rock Project No. NC-40

Sample ID	Sample Depth (feet bgs)	Sample Date	TPHg (mg/kg)	TPHd (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)	MTBE (mg/kg)	Pb (mg/kg)	Other Analytes (mg/kg)
<i>1990 Test Pits</i>											
3472-1	--	11/6/90	<1	--	<0.005	<0.005	<0.005	<0.01	--	--	--
3472-2	--	11/6/90	--	--	--	--	--	--	--	6.8	--
3472-3	--	11/6/90	<1	--	<0.005	<0.005	<0.005	<0.01	--	--	--
3472-4	--	11/6/90	--	--	<0.005	<0.005	<0.005	<0.01	--	5.7	--
<i>1994 Overexcavation</i>											
1	4' - 5'	3/1/94	1.1	--	<0.005	<0.005	<0.005	<0.01	--	--	--
2	4' - 5'	3/1/94	<1.0	<1.0	<0.005	<0.005	<0.005	<0.01	--	--	--
3	4' - 5'	3/1/94	<1.0	--	<0.005	<0.005	<0.005	<0.01	--	--	--
4	4' - 5'	3/1/94	--	--	--	--	--	--	--	7	--
5	5'	3/4/94	3.2	--	<0.005	<0.005	<0.02	<0.02	--	--	--
6	5'	3/4/94	8.1	--	<0.005	<0.005	<0.06	<0.06	--	--	--
7	5'	3/4/94	<1.0	--	<0.005	<0.005	<0.005	<0.01	--	--	--
8	5'	3/4/94	400	--	<0.05	<0.3	<10	<10	--	--	--
9	5'	3/4/94	<1.0	--	<0.005	<0.005	<0.005	<0.01	--	--	--
10	5'	3/4/94	<1.0	--	<0.005	<0.005	<0.005	<0.01	--	--	--
11	5'	3/4/94	<1.0	--	<0.005	<0.005	<0.005	<0.01	--	--	--
12	5'	3/4/94	<1.0	--	<0.005	<0.005	<0.005	<0.01	--	--	--
13	--	3/5/94	<1.0	--	<0.005	<0.005	<0.005	<0.01	--	--	--
14	--	3/5/94	<1.0	--	<0.005	<0.005	<0.005	<0.01	--	--	--
15	5'	3/5/94	670	--	<0.1	<0.5	<10	<10	--	--	--
16	4'-5'	3/11/94	3.9	--	<0.005	<0.005	<0.1	<0.1	--	--	--
17	4'-5'	3/11/94	750	--	<0.25	<0.25	<0.1	<0.1	--	--	--
18	4'-5'	3/11/94	<1.0	--	<0.005	<0.005	<0.005	<0.01	--	--	--
19	4'-5'	3/11/94	<1.0	--	<0.005	<0.005	<0.005	<0.01	--	--	--
20	--	3/14/94	<1.0	--	<0.005	<0.005	<0.005	<0.01	--	--	--
21	--	3/14/94	1.5	--	<0.005	<0.005	<0.005	<0.01	--	--	--
22	--	3/16/94	670	35	<1	<5	<5	<5	--	7.7	--
23	4'-5'	3/21/94	<1.0	--	<0.005	<0.005	<0.005	<0.01	--	--	--
24	4'-5'	3/21/94	<1.0	--	<0.005	<0.005	<0.005	<0.01	--	--	--
25	4'-5'	3/21/94	<1.0	--	<0.005	<0.005	<0.005	<0.01	--	--	--
26	4'-5'	3/22/94	4,600	--	<1.3	<10	<50	<50	--	--	--
27	4'-5'	3/22/94	590	--	<0.25	<2	<10	<10	--	--	--
28	4'-5'	3/22/94	980	--	0.52	<5	<20	<20	--	--	--
1A,1B,1C,1D	SP	4/1/94	450	--	<0.1	<1	<10	<10	--	11	--
2A,2B,2C,2D	SP	4/1/94	1.4	--	<0.005	<0.005	<0.005	<0.01	--	17	--
<i>1996 Investigation</i>											
B-1	3'	2/27/96	<1.0	--	<0.005	<0.005	<0.005	<0.01	<0.05	--	--
B-2	2.5'	2/27/96	<1.0	--	<0.005	<0.005	<0.005	<0.01	<0.05	--	--
B-2	8'	2/27/96	<1.0	--	<0.005	<0.005	<0.005	<0.01	<0.05	--	--
B-3	2'	2/27/96	480	--	0.15	<0.03	<5	<5	<0.5	--	--
B-3	7' - 9'	2/27/96	370	--	<1	<0.2	<0.4	<0.4	<1	--	--
B-3	12' 14'	2/27/96	50	--	0.049	<0.05	<1	<1	<0.05	--	--
B-5	2.5'	2/27/96	57	--	0.042	<0.05	<0.5	<0.5	<0.05	--	--
B-5	7'	2/27/96	5.1	--	0.037	0.012	0.056	0.243	<0.05	--	--
B-6	2.5'	3/1/96	<1.0	--	<0.005	<0.005	<0.005	<0.01	<0.05	--	--
B-6	7'	3/1/96	<1.0	--	<0.005	<0.005	0.014	0.029	<0.05	--	--
MW-1	4.5'-6.5'	6/25/96	<1.0	<1.0	<0.005	<0.005	<0.005	<0.005	<0.05	--	--
MW-1	10'-11.5'	6/25/96	<1.0	<1.0	<0.005	<0.005	<0.005	<0.005	<0.05	--	--
MW-1	15'-16.5'	6/25/96	30	--	<0.025	<0.025	<0.5	<0.5	<0.05	5.5	--
MW-2	5'-6.5'	6/25/96	<1.0	--	<0.005	<0.005	<0.005	<0.005	<0.05	5.2	--
MW-2	10'-11.5'	6/25/96	<1.0	<1.0	<0.005	<0.005	<0.005	<0.005	<0.05	--	--
MW-2	15'-16.5'	6/25/96	<1.0	<1.0	<0.005	<0.005	<0.005	<0.005	<0.05	--	--
PZ-3	5'-6.5'	6/25/96	<1.0	--	<0.005	<0.005	<0.005	<0.005	<0.05	5.7	--
PZ-3	10'-11.5'	6/25/96	<1.0	<1.0	<0.005	<0.005	<0.005	<0.005	<0.05	--	--
PZ-3	15'-16.5'	6/25/96	<1.0	<1.0	<0.005	<0.005	<0.005	<0.005	<0.05	--	--

Table 2
SOIL ANALYTICAL DATA
Former Totem Pole Market
580 South Fortuna Boulevard
Fortuna, California
Blue Rock Project No. NC-40

Sample ID	Sample Depth (feet bgs)	Sample Date	TPHg (mg/kg)	TPHd (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)	MTBE (mg/kg)	Pb (mg/kg)	Other Analytes (mg/kg)
<i>1997 Investigation</i>											
B-1/1-15	5'	1/15/97	<1.0	--	<0.005	<0.005	<0.005	<0.005	<0.05	--	--
B-1/1-15	10'	1/15/97	<1.0	--	<0.005	<0.005	<0.005	<0.005	<0.05	--	--
B-2/1-15	3'	1/15/97	<1.0	--	<0.005	<0.005	<0.005	<0.005	<0.05	--	--
B-2/1-15	5'	1/15/97	1.1	--	<0.005	<0.005	<0.005	<0.005	<0.05	--	--
B-2/1-15	10'	1/15/97	4.9	--	<0.005	<0.5	<0.5	<0.5	<0.05	--	--
B-3/1-15	5'	1/15/97	<1.0	--	<0.005	<0.005	<0.005	<0.005	<0.05	--	--
B-3/1-15	10'	1/15/97	<1.0	--	<0.005	<0.005	<0.005	<0.005	<0.05	--	--
B-4/1-15	5'	1/15/97	1,700	--	<.5	<2.5	<20	<20	<5	--	--
B-4/1-15	10'	1/15/97	<1.0	--	0.0052	<0.005	0.02	0.027	<0.05	--	--
B-5/1-15	3'	1/15/97	<1.0	--	<0.005	<0.005	<0.005	<0.005	<0.05	--	--
B-5/1-15	5'	1/15/97	<1.0	--	<0.005	<0.005	<0.005	<0.005	<0.05	--	--
B-5/1-15	10'	1/15/97	<1.0	--	<0.005	<0.005	<0.005	<0.005	<0.05	--	--
B-6/1-16	2.5'	1/16/97	<1.0	--	<0.005	<0.005	<0.005	<0.005	<0.05	--	--
B-6/1-16	5'	1/16/97	910	--	<0.5	<0.5	<10	<10	<5	--	--
B-7/1-16	1.5'	1/16/97	<1.0	--	<0.005	<0.005	<0.005	<0.005	<0.05	--	--
B-7/1-16	5'	1/16/97	<1.0	--	<0.005	<0.005	<0.005	<0.005	<0.05	--	--
B-8/1-16	3'	1/16/97	<1.0	--	<0.005	<0.005	<0.005	<0.005	<0.05	--	--
B-8/1-16	5'	1/16/97	83	--	0.62	3.3	0.77	2.9	<0.25	--	--
B-9/1-16	5'	1/16/97	130	--	<0.13	<0.13	<.5	<.5	<0.13	--	--
B-9/1-16	10'	1/16/97	<1.0	--	<0.005	<0.005	<0.005	<0.005	<0.05	--	--
B-9/1-16	15'	1/16/97	<1.0	--	<0.005	<0.005	<0.005	<0.005	<0.05	--	--
<i>1999 Investigation</i>											
3472 B1 - 0299	5'	2/17/99	39	--	<0.005	<0.005	<0.5	<0.5	<0.05	--	--
3472 B2 - 0299	5'	2/17/99	<1.0	--	<0.005	<0.005	<0.005	<0.005	<0.05	--	--
3472 B2 - 0299	9'	2/17/99	<1.0	--	<0.005	<0.005	<0.005	<0.005	<0.05	--	--
3472 B2 - 0299	14'	2/17/99	<1.0	--	<0.005	<0.005	<0.005	<0.005	<0.05	--	--
3472 B2 - 0299	19'	2/17/99	<1.0	--	<0.005	<0.005	<0.005	<0.005	<0.05	--	--
3472 B3 - 0299	5'	2/17/99	<1.0	--	<0.005	<0.005	<0.005	<0.005	<0.05	--	--
3472 B3 - 0299	9'	2/17/99	<1.0	--	<0.005	<0.005	<0.005	<0.005	<0.05	--	--
3472 B3 - 0299	14'	2/17/99	<1.0	--	<0.005	<0.005	<0.005	<0.005	<0.05	--	--
3472 B3 - 0299	19'	2/17/99	<1.0	--	<0.005	<0.005	<0.005	<0.005	<0.05	--	--
3472 B4 - 0299	5'	2/17/99	<1.0	--	<0.005	<0.005	<0.005	<0.005	<0.05	--	--
3472 B4 - 0299	9'	2/17/99	<1.0	--	<0.005	<0.005	<0.005	<0.005	<0.05	--	--
3472 B4 - 0299	14'	2/17/99	<1.0	--	<0.005	<0.005	<0.005	<0.005	<0.05	--	--
3472 B4 - 0299	19'	2/17/99	<1.0	--	<0.005	<0.005	<0.005	<0.005	<0.05	--	--
3472 B5 - 0299	5'	2/18/99	<1.0	--	<0.005	<0.005	<0.005	<0.005	<0.05	--	--
3472 B5 - 0299	9'	2/18/99	<1.0	--	<0.005	<0.005	<0.005	<0.005	<0.05	--	--
3472 B5 - 0299	14'	2/18/99	<1.0	--	<0.005	<0.005	<0.005	<0.005	<0.05	--	--
3472 B5 - 0299	19'	2/18/99	<1.0	--	<0.005	<0.005	<0.005	<0.005	<0.05	--	--
<i>2001 Investigation</i>											
HB1-01	4.5'	1/5/01	<1.0	--	<0.005	<0.005	<0.005	<0.005	<0.05	--	--
HB2-01	4.5'	1/5/01	<1.0	--	<0.005	<0.005	<0.005	<0.005	<0.05	--	--
HB3-01	4.5'	1/5/01	1.7	--	<0.005	<0.005	<0.005	<0.005	<0.05	--	--
HB4-01	4.5'	1/5/01	1	--	<0.005	<0.005	<0.005	<0.005	<0.05	--	--
HB5-01	4.5'	1/5/01	1,100	--	<0.25	<0.25	<2	<2.5	<2.5	--	--
HA-EJFI	5'	6/21/01	1.2	--	<0.005	<0.005	<0.005	<0.005	<0.05	--	--

Table 2
SOIL ANALYTICAL DATA
Former Totem Pole Market
580 South Fortuna Boulevard
Fortuna, California
Blue Rock Project No. NC-40

Sample ID	Sample Depth (feet bgs)	Sample Date	TPHg (mg/kg)	TPHd (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)	MTBE (mg/kg)	Pb (mg/kg)	Other Analytes (mg/kg)
<i>2005 Investigation</i>											
B-10	8	2/2/05	<1.0	3.1	<0.005	<0.005	<0.005	<0.01	<0.025	--	<0.01 <05
B-10	12	2/2/05	<1.0	1.6	<0.005	<0.005	<0.005	<0.01	<0.025	--	<0.01 <05
B-10	16	2/2/05	<1.0	<1.0	<0.005	<0.005	<0.005	<0.01	<0.025	--	<0.01 <05
B-10	20	2/2/05	<1.0	3.1	<0.005	<0.005	<0.005	<0.01	<0.025	--	<0.01 <05
B-11	4	2/2/05	53	14	<0.005	<0.005	<0.005	<0.01	<0.025	--	<0.01 <05
B-11	8	2/2/05	<1.0	4	<0.005	<0.005	<0.005	<0.01	<0.025	--	<0.01 <05
B-11	12	2/2/05	<1.0	1.7	<0.005	<0.005	<0.005	<0.01	<0.025	--	<0.01 <05
B-11	16	2/2/05	<1.0	<1.0	<0.005	<0.005	<0.005	<0.01	<0.025	--	<0.01 <05
B-11	20	2/2/05	<1.0	<1.0	<0.005	<0.005	<0.005	<0.01	<0.025	--	<0.01 <05
B-12	4	2/2/05	<1.0	<1.0	<0.005	<0.005	<0.005	<0.01	<0.025	--	<0.01 <05
B-12	8	2/2/05	<1.0	2.3	<0.005	<0.005	<0.005	<0.01	<0.025	--	<0.01 <05
B-12	12	2/2/05	<1.0	<1.0	<0.005	<0.005	<0.005	<0.01	<0.025	--	<0.01 <05
B-12	16	2/2/05	<1.0	<1.0	<0.005	<0.005	<0.005	<0.01	<0.025	--	<0.01 <05
B-12	20	2/2/05	<1.0	<1.0	<0.005	<0.005	<0.005	<0.01	<0.025	--	<0.01 <05

Notes

bgs: below ground surface

"--" Not analyzed, available or applicable

mg/kg = milligrams per kilogram

<###: Not detected above the method detection limit as shown

TPHg: Total petroleum hydrocarbons as gasoline by EPA Method 5030/8015M or 5030/8260B

TPHd: Total petroleum hydrocarbons as diesel by EPA Method 8015

BTEX by EPA Method 8020 or 8260B

MTBE: Methyl tertiary butyl ether by EPA 8020 or 8260B

Lead by EPA Method 6010

Other Analytes:

TBA: Tertiary butanol by EPA 8260B

DIPE: Di isopropyl ether by EPA 8260B

ETBE: Ethyl tertiary butyl ether by EPA 8260B

TAME: Tertiary amyl methyl ether by EPA 8260B

Table 3
GROUNDWATER ELEVATIONS AND ANALYTICAL DATA
Former Totem Pole Market
580 South Fortuna Boulevard
Fortuna, California
Blue Rock Project No. NC-40

Sample ID	Sample Date	TOC (feet)	DTW (feet)	SPH (feet)	GWE (feet)	TPHg (µg/L)	TPHd (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	MTBE (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	Pb (µg/L)
MW-1	8/12/96	98.70	13.92	0.00	84.78	1,700	<500	72	<3	24	72	<10	--	--	--	--	--
	9/9/96	98.70	14.40	0.00	84.30	--	--	--	--	--	--	--	--	--	--	--	--
Screen	10/8/96	98.70	14.40	0.00	84.30	--	--	--	--	--	--	--	--	--	--	--	--
5' - 20'	11/25/96	98.70	6.00	0.00	92.70	1,700	110	31	<5	38	59	<5	--	--	--	--	<2
	1/9/97	98.70	4.78	0.00	93.92	--	--	--	--	--	--	--	--	--	--	--	--
	2/4/97	98.70	4.92	0.00	93.78	930	330	1.8	<10	14	20	<5	--	--	--	--	--
	3/19/97	98.70	10.05	0.00	88.65	--	--	--	--	--	--	--	--	--	--	--	--
	4/7/97	98.70	11.66	0.00	87.04	--	--	--	--	--	--	--	--	--	--	--	--
	5/1/97	98.70	12.11	0.00	86.59	790	480	1.3	2.7	5.9	16.7	<5	--	--	--	--	--
	6/3/97	98.70	12.64	0.00	86.06	--	--	--	--	--	--	--	--	--	--	--	--
	7/7/97	98.70	13.57	0.00	85.13	--	--	--	--	--	--	--	--	--	--	--	--
	8/13/97	98.70	13.98	0.00	84.72	--	--	--	--	--	--	--	--	--	--	--	--
	1/16/98	98.70	9.32	0.00	89.38	--	--	--	--	--	--	--	--	--	--	--	--
	5/5/98	98.70	9.79	0.00	88.91	1,000	190	2.8	<2	15	<10	<5	--	--	--	--	--
	2/22/99	98.70	7.61	0.00	91.09	--	--	--	--	--	--	--	--	--	--	--	--
	3/5/99	98.70	--	0.00	--	830	120	<5	<5	12	<5	<5	--	--	--	--	--
	5/3/01	98.70	12.22	0.00	86.48	4,700	300	14	<30	28	38	<30	--	--	--	--	--
	9/4/01	98.70	13.95	0.00	84.75	--	--	--	--	--	--	--	--	--	--	--	--
	11/9/01	98.70	13.90	0.00	84.80	--	--	--	--	--	--	--	--	--	--	--	--
	2/25/03	98.70	9.54	0.00	89.16	1,900	140	0.85	<0.5	5.5	0.74	<1	ND	3.9	ND	ND	--
	5/16/03	98.70	7.82	0.00	90.88	1,500	220	<0.5	<0.5	3.8	<5	<1	ND	4.3	ND	ND	--
	8/6/03	98.70	13.59	0.00	85.11	2,000	280	1.4	<0.5	4.4	1	<1	ND	3.0	ND	ND	--
	11/11/03	98.70	13.97	0.00	84.73	2,000	--	4.3	<0.5	3.4	1.8	<1	ND	ND	ND	ND	--
	2/17/04	98.70	5.96	0.00	92.74	2,600	290	<5	<0.5	5.0	0.53	<1	ND	ND	ND	ND	--
	5/14/04	98.70	12.31	0.00	86.39	2,200	140	1.2	<0.5	3.0	1.31	<1	ND	ND	ND	ND	--
	8/17/04	98.70	13.98	0.00	84.72	2,700	--	3.5	<0.5	3.1	0.87	<1	ND	ND	ND	ND	--
	11/30/04	98.70	13.96	0.00	84.74	2,900	--	10	<0.5	3.0	1	<1	ND	ND	ND	ND	--
	2/28/05	58.63	8.75	0.00	49.88	3,700	160	<5	<0.5	4.4	0.6	<1	ND	2.3	ND	ND	--
	5/2/05	58.63	10.17	0.00	48.46	3,200	330	0.66	<0.5	2.9	0.62	<1	ND	4.1	ND	ND	--
	8/9/05	58.63	13.15	0.00	45.48	--	--	--	--	--	--	--	--	--	--	--	--
	8/18/05	58.63	13.25	0.00	45.38	1,800	<1,000*	1.9	<0.5	1.9	<5	<0.5	9.7	5.2	<0.5	<0.5	--

Table 3
GROUNDWATER ELEVATIONS AND ANALYTICAL DATA
Former Totem Pole Market
580 South Fortuna Boulevard
Fortuna, California
Blue Rock Project No. NC-40

Sample ID	Sample Date	TOC (feet)	DTW (feet)	SPH (feet)	GWE (feet)	TPHg (µg/L)	TPHd (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	MTBE (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	Pb (µg/L)
MW-2	8/12/96	99.45	17.17	0.00	82.28	<50	<500	<0.5	<0.5	<0.5	<0.5	<5	ND	ND	ND	ND	--
	9/9/96	99.45	14.58	0.00	84.87	--	--	--	--	--	--	--	--	--	--	--	--
Screen	10/8/96	99.45	14.56	0.00	84.89	--	--	--	--	--	--	--	--	--	--	--	--
5' - 15'	11/25/96	99.45	4.70	--	--	<50	<500	<0.5	<0.5	<0.5	0.77	<5	ND	ND	ND	ND	0.028
	1/9/97	99.45	4.39	0.00	95.06	--	--	--	--	--	--	--	--	--	--	--	--
	2/4/97	99.45	3.20	0.00	96.25	<50	<500	<0.5	<0.5	<0.5	<0.5	69	ND	ND	ND	ND	--
	3/19/97	99.45	4.36	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	4/7/97	99.45	10.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	5/1/97	99.45	4.79	0.00	94.66	<50	<500	<0.5	0.55	<0.5	1.59	<5	ND	ND	ND	ND	--
	6/3/97	99.45	13.80	0.00	85.65	--	--	--	--	--	--	--	--	--	--	--	--
	7/7/97	99.45	14.18	0.00	85.27	--	--	--	--	--	--	--	--	--	--	--	--
	8/13/97	99.45	14.18	0.00	85.27	--	--	--	--	--	--	--	--	--	--	--	--
	1/16/98	99.45	13.63	0.00	85.82	--	--	--	--	--	--	--	--	--	--	--	--
	5/5/98	99.45	11.57	0.00	87.88	<50	<500	<0.5	<0.5	<0.5	<0.5	<5	ND	ND	ND	ND	--
	2/22/99	99.45	12.65	0.00	86.80	--	--	--	--	--	--	--	--	--	--	--	--
	3/5/99	99.45	8.51	0.00	90.94	<50	<500	<0.5	<0.5	<0.5	<0.5	<5	ND	ND	ND	ND	--
	5/3/01	99.45	11.64	0.00	87.81	--	--	--	--	--	--	--	--	--	--	--	--
	9/4/01	99.45	14.08	0.00	85.37	<50	<500	<0.5	<0.5	<0.5	<0.5	<5	ND	ND	ND	ND	--
	11/9/01	99.45	13.99	0.00	85.46	--	--	--	--	--	--	--	--	--	--	--	--
	2/25/03	99.45	3.35	0.00	96.10	--	--	--	--	--	--	--	--	--	--	--	--
	5/16/03	99.45	4.72	0.00	94.73	--	--	--	--	--	--	--	--	--	--	--	--
	8/6/03	99.45	13.70	0.00	85.75	--	--	--	--	--	--	--	--	--	--	--	--
	11/11/03	99.45	14.04	0.00	85.41	--	--	--	--	--	--	--	--	--	--	--	--
	2/17/04	99.45	1.22	0.00	98.23	<50	<500	<0.5	<0.5	<0.5	<0.5	<5	ND	ND	ND	ND	--
	5/14/04	99.45	12.74	0.00	86.71	--	--	--	--	--	--	--	--	--	--	--	--
	8/17/04	99.45	14.20	0.00	85.25	--	--	--	--	--	--	--	--	--	--	--	--
	11/30/04	99.45	13.03	0.00	86.42	--	--	--	--	--	--	--	--	--	--	--	--
	2/28/05	58.97	2.92	0.00	56.05	<50	<500	<0.5	<0.5	<0.5	<0.5	<5	ND	ND	ND	ND	--
	5/2/05	58.97	10.08	0.00	48.89	--	--	--	--	--	--	--	--	--	--	--	--
	8/9/05	58.97	14.03	0.00	44.94	--	--	--	--	--	--	--	--	--	--	--	--
	8/18/05	58.97	14.03	0.00	44.94	--	--	--	--	--	--	--	--	--	--	--	--

Table 3
GROUNDWATER ELEVATIONS AND ANALYTICAL DATA
Former Totem Pole Market
580 South Fortuna Boulevard
Fortuna, California
Blue Rock Project No. NC-40

Sample ID	Sample Date	TOC (feet)	DTW (feet)	SPH (feet)	GWE (feet)	TPHg (µg/L)	TPHd (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	MTBE (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	Pb (µg/L)
MW-3	8/12/96	98.89	16.95	0.00	81.94	<50	<200	<0.5	<0.5	<0.5	<0.5	<5	--	--	--	--	--
	9/9/96	98.89	13.93	0.00	84.96	--	--	--	--	--	--	--	--	--	--	--	--
Screen	10/8/96	98.89	14.79	0.00	84.10	--	--	--	--	--	--	--	--	--	--	--	--
	11/25/96	98.89	2.54	0.00	96.35	<50	<50	<0.5	<0.5	<0.5	<0.5	<5	--	--	--	--	--
5' - 15'	1/9/97	98.89	2.58	0.00	96.31	--	--	--	--	--	--	--	--	--	--	--	--
	2/4/97	98.89	2.04	0.00	96.85	<50	<50	<0.5	<0.5	<0.5	<0.5	<5	--	--	--	--	--
	3/19/97	98.89	2.97	0.00	95.92	--	--	--	--	--	--	--	--	--	--	--	--
	4/7/97	98.89	3.31	0.00	95.58	--	--	--	--	--	--	--	--	--	--	--	--
	5/1/97	98.89	2.32	0.00	96.57	<50	<50	<0.5	<0.5	<0.5	<0.5	<5	--	--	--	--	--
	6/3/97	98.89	2.55	0.00	96.34	--	--	--	--	--	--	--	--	--	--	--	--
	7/7/97	98.89	10.75	0.00	88.14	--	--	--	--	--	--	--	--	--	--	--	--
	8/13/97	98.89	14.14	0.00	84.75	--	--	--	--	--	--	--	--	--	--	--	--
	1/16/98	98.89	0.51	0.00	98.38	--	--	--	--	--	--	--	--	--	--	--	--
	5/5/98	98.89	3.32	0.00	95.57	<50	<50	<0.5	<0.5	<0.5	<0.5	<5	--	--	--	--	--
	2/22/99	98.89	1.00	0.00	97.89	--	--	--	--	--	--	--	--	--	--	--	--
	3/5/99	98.89	--	--	---	<50	<50	<0.5	<0.5	<0.5	<0.5	<5	--	--	--	--	--
	5/3/01	98.89	2.95	0.00	95.94	--	--	--	--	--	--	--	--	--	--	--	--
	9/4/01	98.89	14.15	0.00	84.74	<50	<50	<0.5	<0.5	<0.5	<0.5	<5	--	--	--	--	--
	11/9/01	98.89	11.39	0.00	87.50	--	--	--	--	--	--	--	--	--	--	--	--
	2/25/03	98.89	4.24	0.00	94.65	--	--	--	--	--	--	--	--	--	--	--	--
	5/16/03	98.89	3.18	0.00	95.71	--	--	--	--	--	--	--	--	--	--	--	--
	8/6/03	98.89	14.02	0.00	84.87	--	--	--	--	--	--	--	--	--	--	--	--
	11/11/03	98.89	2.87	0.00	96.02	--	--	--	--	--	--	--	--	--	--	--	--
	2/17/04	98.89	0.74	0.00	98.15	<50	<50	<0.5	<0.5	<0.5	<0.5	<1	ND	ND	ND	ND	ND
	5/14/04	98.89	9.12	0.00	89.77	--	--	--	--	--	--	--	--	--	--	--	--
	8/17/04	98.89	14.15	0.00	84.74	--	--	--	--	--	--	--	--	--	--	--	--
	11/30/04	98.89	3.26	0.00	95.63	--	--	--	--	--	--	--	--	--	--	--	--
	2/28/05	58.85	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	5/2/05	58.85	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	8/9/05	58.85	12.64	0.00	46.21	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<0.5	<0.5	--
	8/18/05	58.85	13.82	0.00	45.03	---	---	---	---	---	---	---	---	---	---	---	--

Table 3
GROUNDWATER ELEVATIONS AND ANALYTICAL DATA
Former Totem Pole Market
580 South Fortuna Boulevard
Fortuna, California
Blue Rock Project No. NC-40

Sample ID	Sample Date	TOC (feet)	DTW (feet)	SPH (feet)	GWE (feet)	TPHg (µg/L)	TPHd (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	MTBE (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	Pb (µg/L)
MW-4S	2/28/05	58.15	3.39	0.00	54.76	<50	<50	<0.5	<0.5	<0.5	<0.5	<1	ND	ND	ND	ND	--
Screen	5/2/05	58.15	3.57	0.00	54.58	<50	<50	<0.5	<0.5	<0.5	<0.5	<1	ND	ND	ND	ND	--
4' - 9'	8/9/05	58.15	4.55	0.00	53.60	<50	67	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<0.5	<0.5	--
	8/18/05	58.15	6.70	0.00	51.45	--	--	--	--	--	--	--	--	--	--	--	--
MW-4D	2/28/05	58.03	11.93	0.00	46.10	<50	<50	<0.5	<0.5	<0.5	<0.5	<1	ND	ND	ND	ND	--
Screen	5/2/05	58.03	11.13	0.00	46.90	<50	<50	<0.5	<0.5	<0.5	<0.5	<1	ND	ND	ND	ND	--
13' - 18'	8/9/05	58.03	13.22	0.00	44.81	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<0.5	<0.5	--
	8/18/05	58.03	13.66	0.00	44.37	--	--	--	--	--	--	--	--	--	--	--	--
MW-5	2/28/05	57.20	11.05	0.00	46.15	<50	<50	<0.5	<0.5	<0.5	<0.5	<1	ND	ND	ND	ND	--
Screen	5/2/05	57.20	10.31	0.00	46.89	<50	<50	<0.5	<0.5	<0.5	<0.5	<1	ND	ND	ND	ND	--
15' - 20'	8/9/05	57.20	12.41	0.00	44.79	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<0.5	<0.5	--
	8/18/05	57.20	12.86	0.00	44.34	---	---	---	---	---	---	---	---	---	---	---	---
MCL						---		1.0	150	300	1,750	13					
Taste and odor threshold						5		---	42	29	17	5					
NCRWQCB Cleanup Goals						50		0.5	42	29	17	5					

Notes:

TOC: Top of well casing referenced to arbitrary site benchmark until 3/02, MSL thereafter
DTW: Depth to water as referenced to top of casing
SPH: Separate phase hydrocarbon on top of groundwater
GWE: Groundwater elevation as referenced to benchmark
µg/L = micrograms per liter
TPHg: Total petroleum hydrocarbons as gasoline by Method 5030/8015M or 5030/8260B
TPHd: Total petroleum hydrocarbons as diesel by Method 8015 (* = silica-gel clean-up)
MTBE: Methyl tertiary butyl ether by Method 8020 or 8260B

TBA: Tertiary butyl alcohol by Method 8260B
DIPE: Di isopropyl ether by Method 8260B
ETBE: Ethyl tertiary butyl ether by Method 8260B
TAME: Tertiary amyl methyl ether by method 8260B
MCL : Maximum contaminant level
NCRWQCB : North Coast Region Water Quality Control Board

Table 4
CUMULATIVE GRAB GROUNDWATER ANALYTICAL DATA
Former Totem Pole Market
580 South Fortuna Blvd.
Fortuna, California
Blue Rock Project No. NC-40

Sample No.	Boring Depth (feet bgs)	Water Depth (feet bgs)	Sampling Date	TPHd (µg/L)	TPHg (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	MTBE (µg/L)
<i>Shallow Zone Grab Samples (~4 to 9 feet)</i>										
B-1	7	3	2/27/96	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
B-1/1-15	10	2.5	1/15/98	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
B-2/1-15	10	3	1/15/98	--	3,200	<2.5	<7	<20	<20	<25
B-3/1-15	10	2.5	1/15/98	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
B-4/1-15	10	3	1/15/98	--	1,600	<4	<5	<12	<12	<5
B-5/1-15	10	1.75	1/15/98	--	<50	<0.5	<0.5	<0.5	<0.5	<5
B-6/1-16	10	1.5	1/16/98	--	2,500	<5	<5	<30	<30	<50
B-7/1-16	10	2	1/16/98	--	50	<0.5	<0.5	<1.5	<1.5	<5
B-8/1-16	10	2.5	1/16/98	--	470	<0.5	<4	<8	<8	<5
HA-EJF1	5	4.5	6/21/01	--	<50	<0.5	<0.5	<0.5	<0.5	<3
<i>Lower Zone Grab Samples (~14 to 19 feet)</i>										
B-9/1-16	20	16	1/16/98	--	<50	<0.5	<0.5	<0.5	<0.5	<5
B2-0299	19	17	2/17/99	--	<50	<0.5	<0.5	<0.5	<0.5	<5
B3-0299	19	14	2/17/99	--	<50	<0.5	<0.5	<0.5	<0.5	<5
B4-0299	19	14	2/17/99	--	<50	<0.5	<0.5	<0.5	<0.5	<5
B10-W16-20	20	14	2/2/05	--	<50	<0.5	<0.5	<0.5	<0.5	<1
<i>Grab Samples from Potentially Mixed Zones</i>										
B-3	14	2	2/27/96	--	14,000	120	<50	370	80	<130
B5-0299	19	10	2/17/99	--	<50	<0.5	<0.5	<0.5	<0.5	<5

Notes :

µg/L: micrograms per liter

"--": Not analyzed, available, or applicable

TPHd: Total petroelium hydrocarbons as diesel

TPHg: Total petroleum hydrocarbons as gasoline

BTEX: benzene, toluene, ethylbenzene, xylenes

MTBE: Methyl tertiary butyl ether

Note: Data transcribed from LACO data

Table 5
DOMESTIC WELL ANALYTICAL DATA
Former Totem Pole Market
580 South Fortuna Boulevard
Fortuna, California
Blue Rock Project No. NC-40

Well ID	Sample Date	TPHg (µg/L)	TPHd (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	MTBE (µg/L)	Other Analytes (1) (µg/L)
555 S. Spring St.	3/12/01	<50	58*	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5-<50
	5/2/01	---	<50	---	---	---	---	---	---
491 S. Spring St.	3/12/01	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5-<50
1702 1st Street	3/16/01	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5-<50

Notes :

TPHg: Total petroleum hydrocarbons as gasoline by Method 5030/8015M or 5030/8260B

TPHd: Total petroleum hydrocarbons as diesel by Method 8015

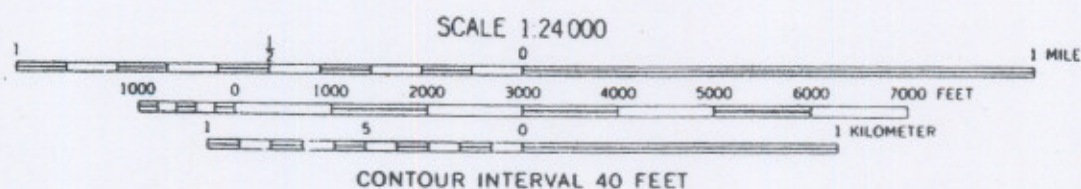
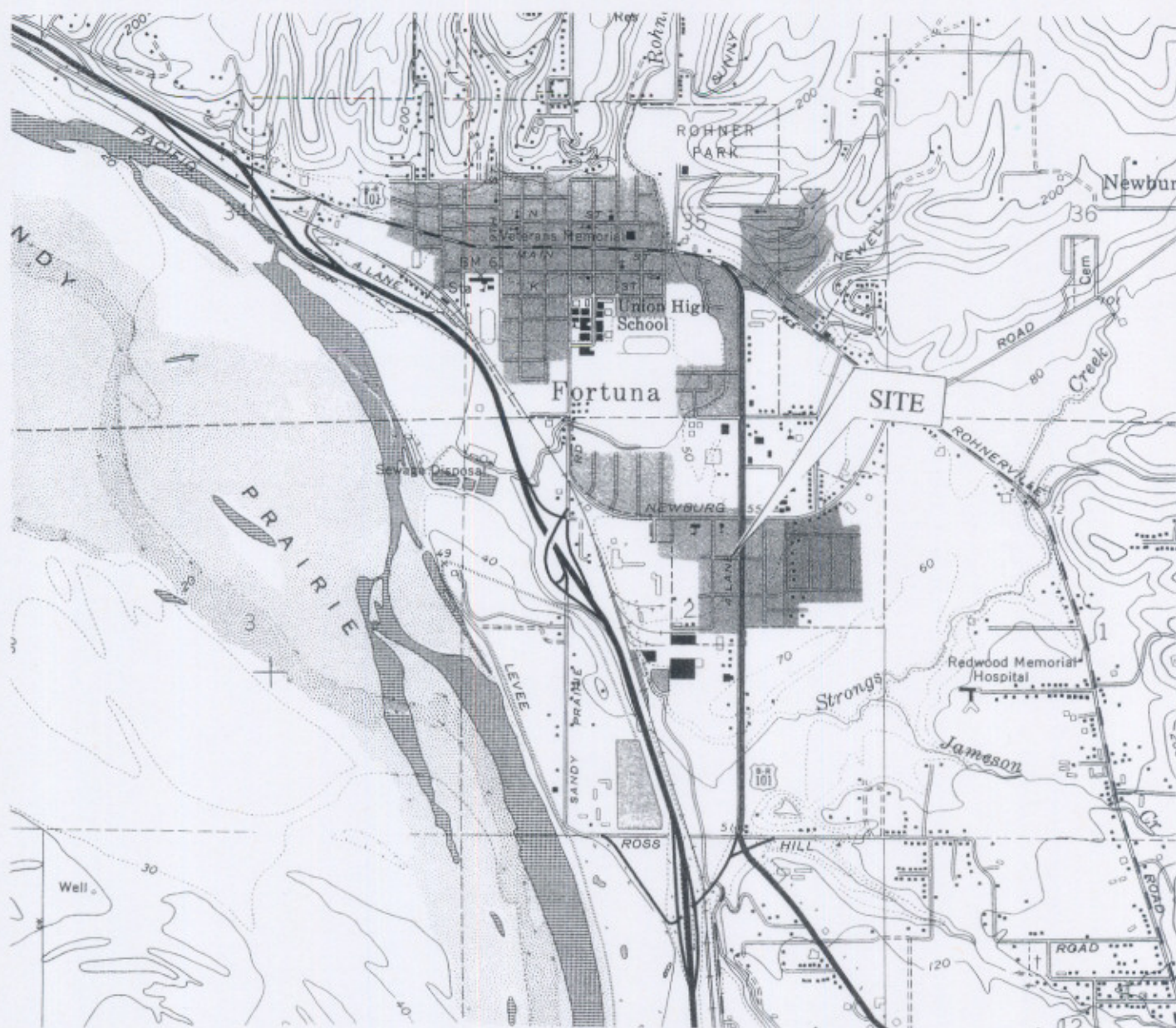
BTEX: by Method 8020 or 8260B

MTBE: Methyl tertiary butyl ether by Method 8020 or 8260B

(1): Other Analytes tested by LACO, but not specified in 9/26/03 letter

*: LACO reports in 9/26/03 letter that the sample contains material in diesel range, but that the peak pattern is atypical of diesel fuel. The TPHd results represent the amount of material in the diesel range.

µg/L: micrograms per liter



MAP SOURCE: USGS Fortuna
Quadrangle



Site Location Map

Former Totem Pole Market
580 South Fortuna Boulevard
Fortuna, California



BLUE ROCK
ENVIRONMENTAL, INC.

Project No.
NC-40

Date
11/05

Figure
1



0 30
APPROX. SCALE IN FEET

EXPLANATION

- MW-1 MONITORING WELL
- B10 SOIL BORING
- 16 SAMPLE LOCATION

Site Plan
Former Totem Pole Market
580 S. Fortuna Blvd
Fortuna, CA

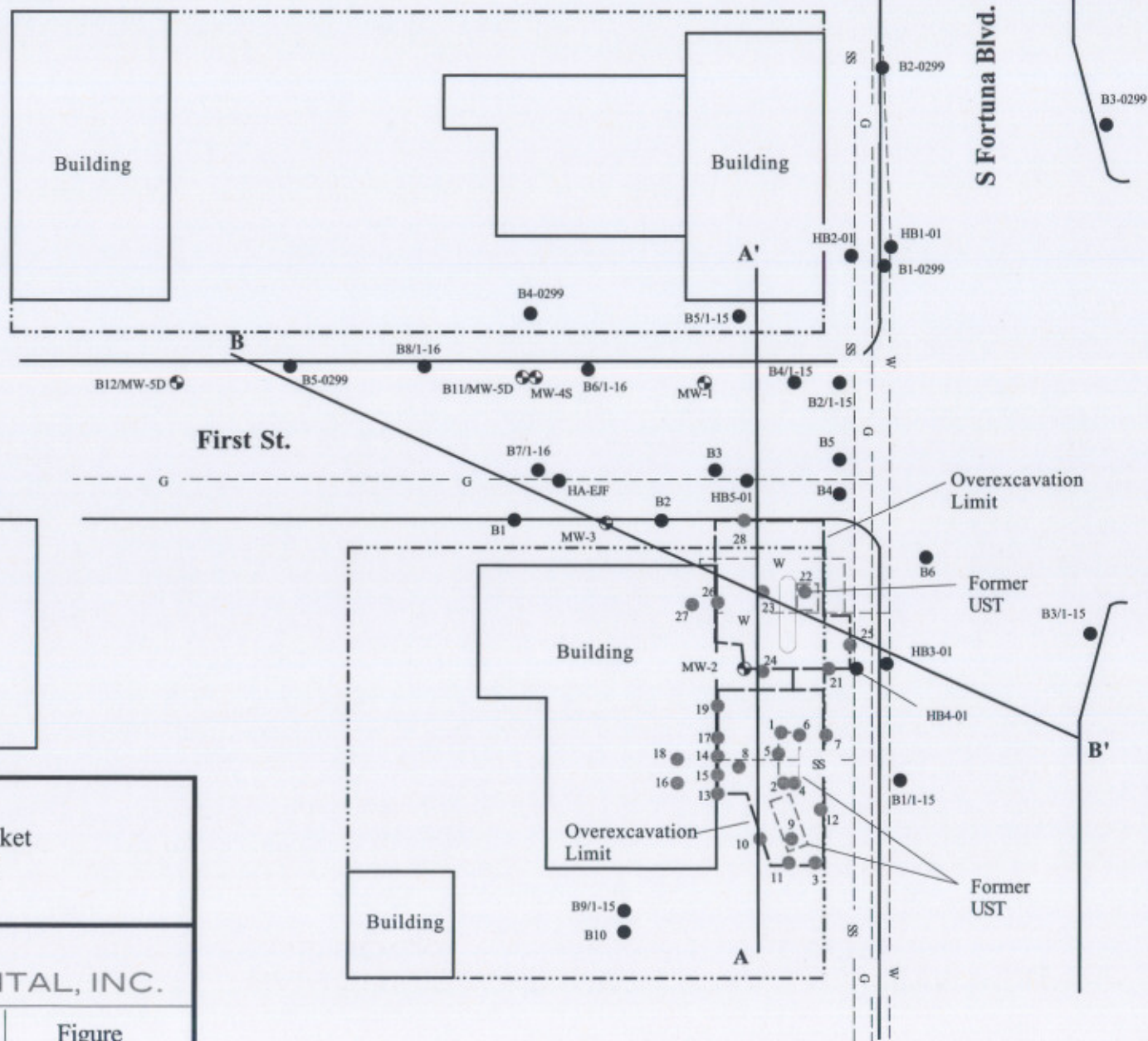


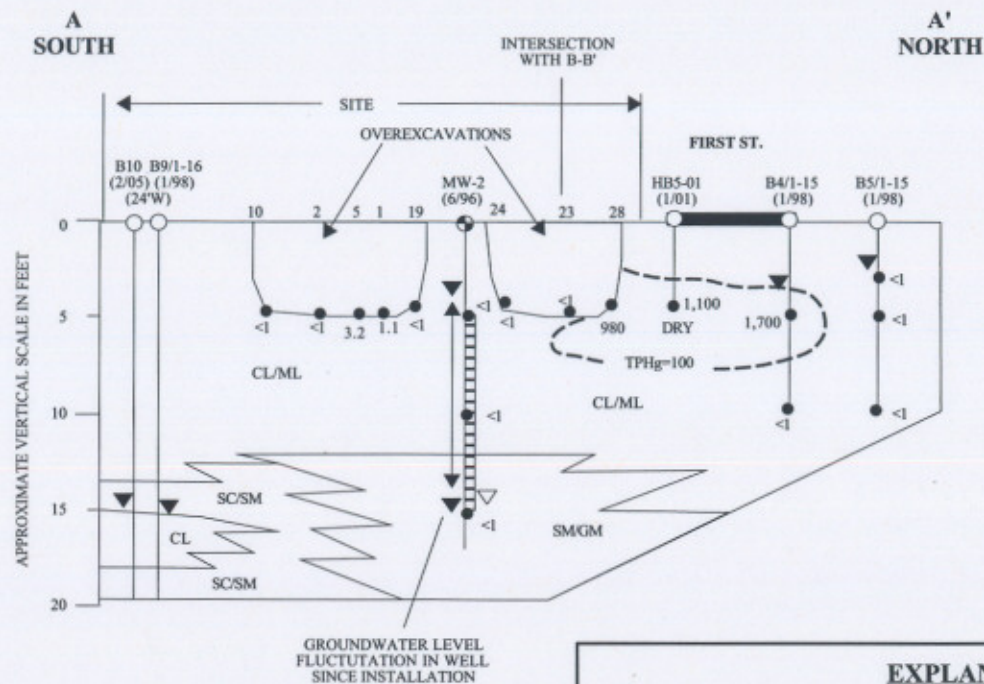
**BLUE ROCK
ENVIRONMENTAL, INC.**

Project No.
NC-40

Report Date
11/05

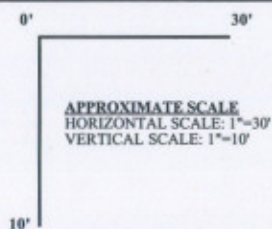
Figure
2





EXPLANATION

CL/ML	CLAY / SILT	(N10°)	DIRECTION AND DISTANCE FROM SECTION LINE
SM/GM	SILTY SAND / SILTY GRAVEL		LOGGED & SCREENED INTERVAL
SC/SM	CLAYEY SAND / SILTY SAND	1.2	TPHg CONCENTRATION (mg/kg) SOIL SAMPLES
▼	STABILIZED WATER DURING DRILLING		
▽	FIRST ENCOUNTERED WATER DURING DRILLING		
●	SOIL SAMPLE		
MW-3 (1/96)	BORING/WELL I.D. (MONTH/YEAR OF DRILLING)	TPHg=100	TPHg ISO-CONCENTRATION IN SOIL (mg/kg)



A-A' CROSS-SECTION
Former Totem Pole Market
580 S. Fortuna Blvd.
Fortuna, CA



**BLUE ROCK
ENVIRONMENTAL, INC.**

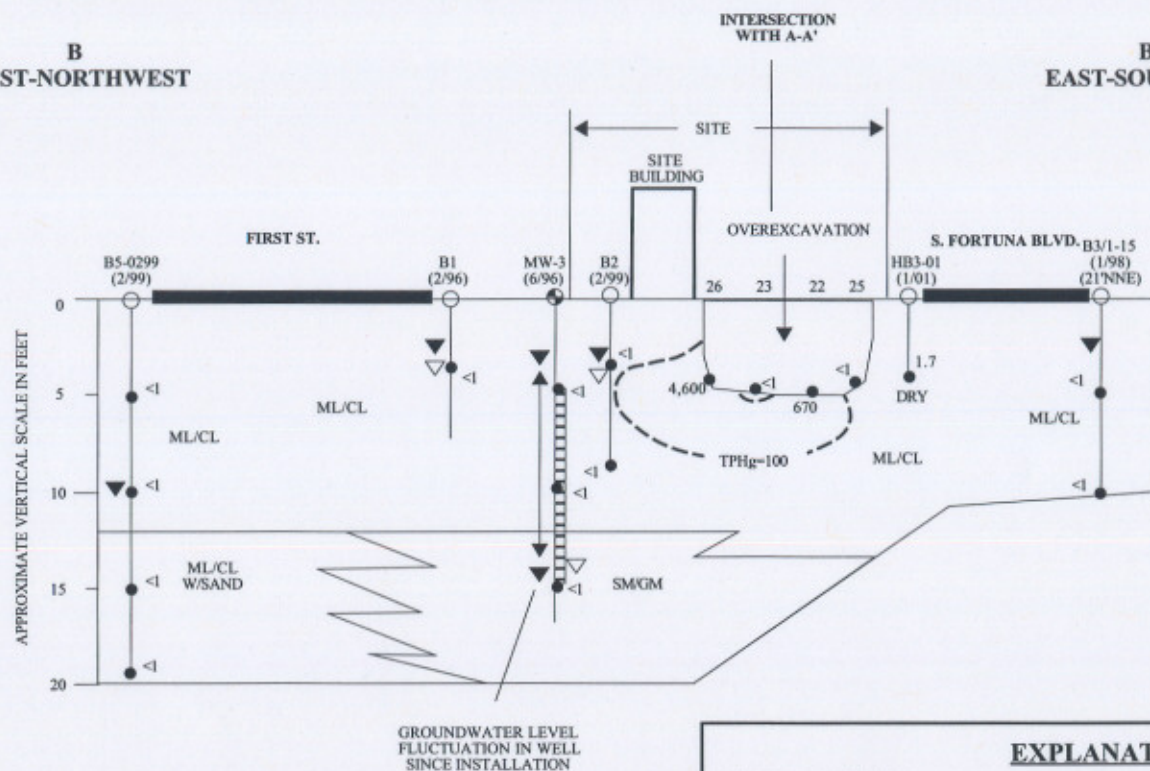
Project No.
NC-40

Report Date
11/05

Figure
3a

B
WEST-NORTHWEST

B'
EAST-SOUTHEAST



EXPLANATION

CL/ML	CLAY / SILT	(N10°)	DIRECTION AND DISTANCE FROM SECTION LINE
SM/GM	SILTY SAND / SILTY GRAVEL		
SC/SM	CLAYEY SAND / SILTY SAND		
▼	STABILIZED WATER DURING DRILLING		
▽	FIRST ENCOUNTERED WATER DURING DRILLING		
●	SOIL SAMPLE		
MW-3 (1/96)	BORING/WELL I.D. (MONTH/YEAR OF DRILLING)		
		LOGGED & SCREENED INTERVAL	
		1.2	TPHg CONCENTRATION (mg/kg) SOIL SAMPLES
		TPHg=100	TPHg ISO-CONCENTRATION IN SOIL (mg/kg)

0' 30'

APPROXIMATE SCALE
HORIZONTAL SCALE: 1"=30'
VERTICAL SCALE: 1"=10'

10'

B-B' CROSS-SECTION
Former Totem Pole Market
580 S. Fortuna Blvd.
Fortuna, CA

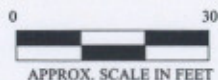


BLUE ROCK
ENVIRONMENTAL, INC.

Project No.
NC-40

Report Date
11/05

Figure
3b



EXPLANATION

TPHg > 100
ESTIMATED ISO-CONTOUR OF
TPHg > 100 MG/KG IN SOIL
FROM ~3-10 FT BGS
(BASED ON MAP FROM
LACO REPORT 6/05)

TPHg in Soil (~3-10 ft bgs)
Former Totem Pole Market
580 S. Fortuna Blvd
Fortuna, CA

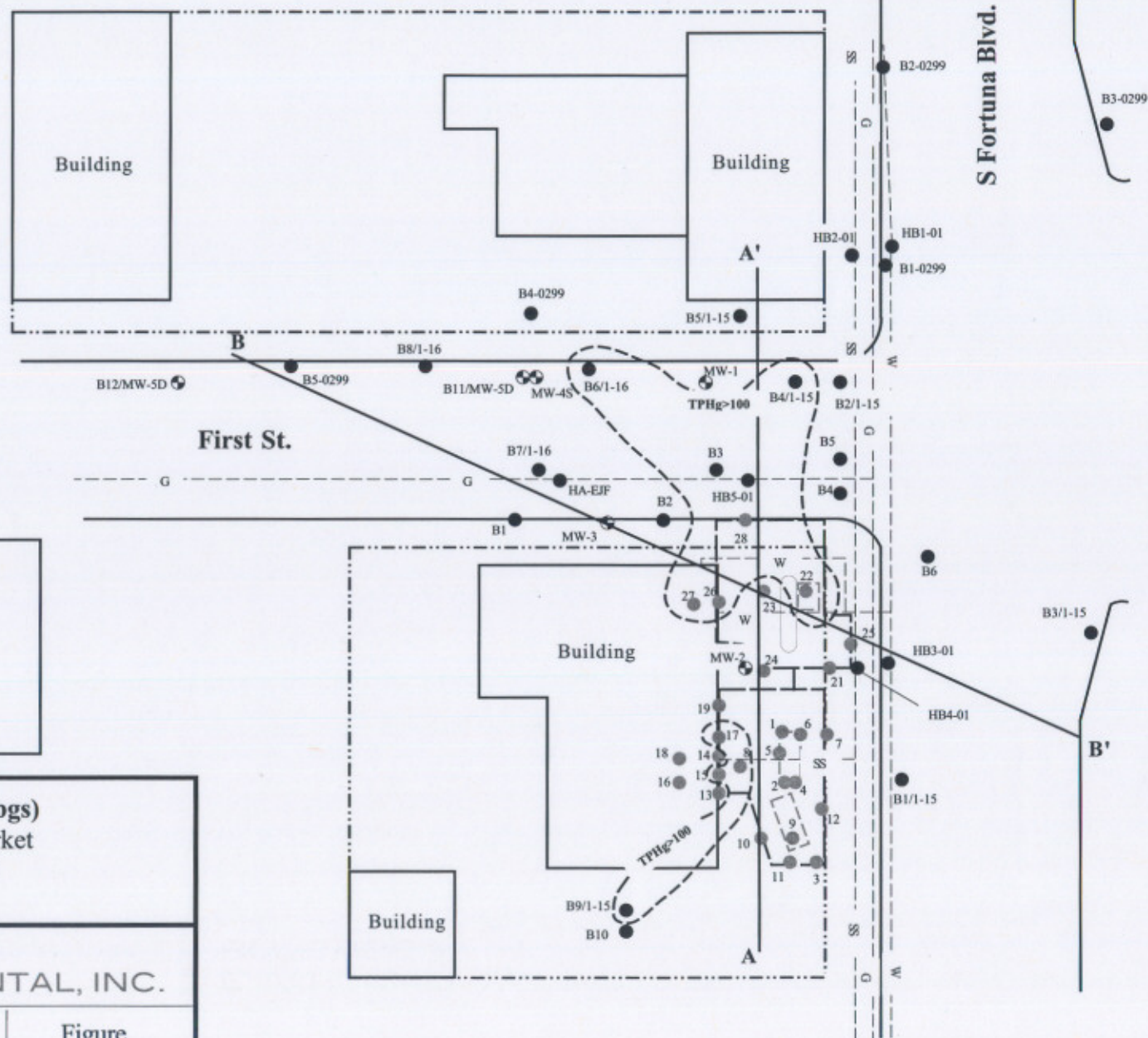


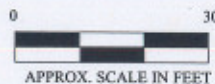
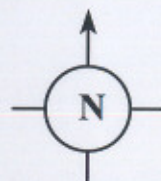
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Project No.
NC-40

Report Date
11/05

Figure
4





EXPLANATION



MW-1

Monitoring well

MW-1
TPHg = 1,800
Benzene = 1.9
MTBE = <0.5

Groundwater analytical results.
All results in micrograms per liter.
<# indicates non-detection of
chemical above instrument detection
level.

* Data for MW-1 collected on 8/18/05

Groundwater Sample Results for Monitoring Wells (8/9/05)

Former Totem Pole Market
580 S. Fortuna Blvd
Fortuna, CA

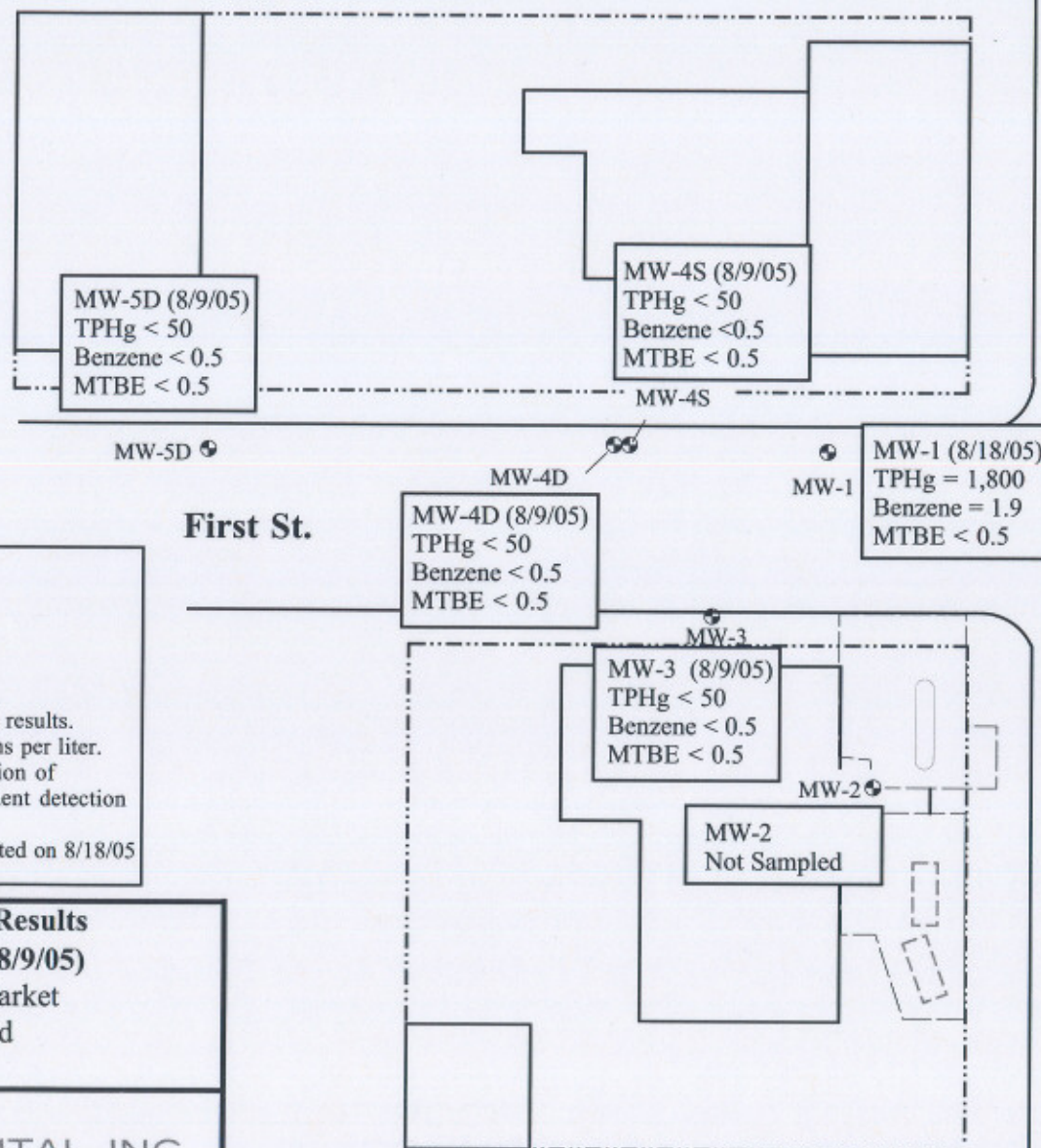


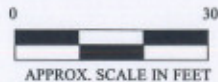
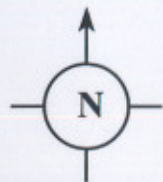
BLUE ROCK
ENVIRONMENTAL, INC.

Project No.
NC-40

Figure Date
11/05

Figure
5





EXPLANATION



EXISTING MONITORING WELL



PROPOSED WELL DESTRUCTION



PROPOSED INSTALLATION OF DUAL COMPLETION
WELL SET (~4-9 FT BGS & 15-20 FT BGS)

Proposed Well Installation & Well Destruction

Former Totem Pole Market
580 S. Fortuna Blvd
Fortuna, CA

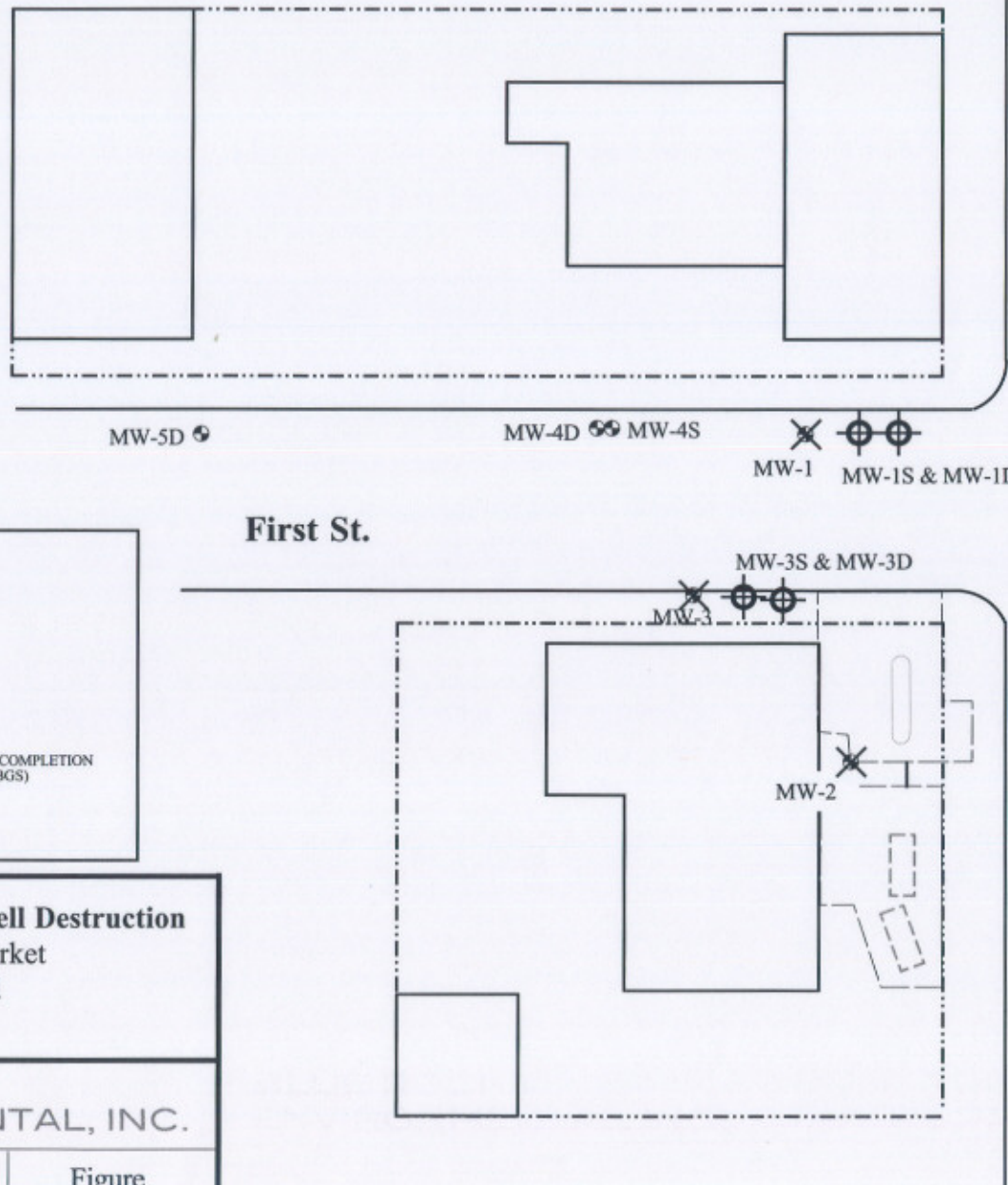


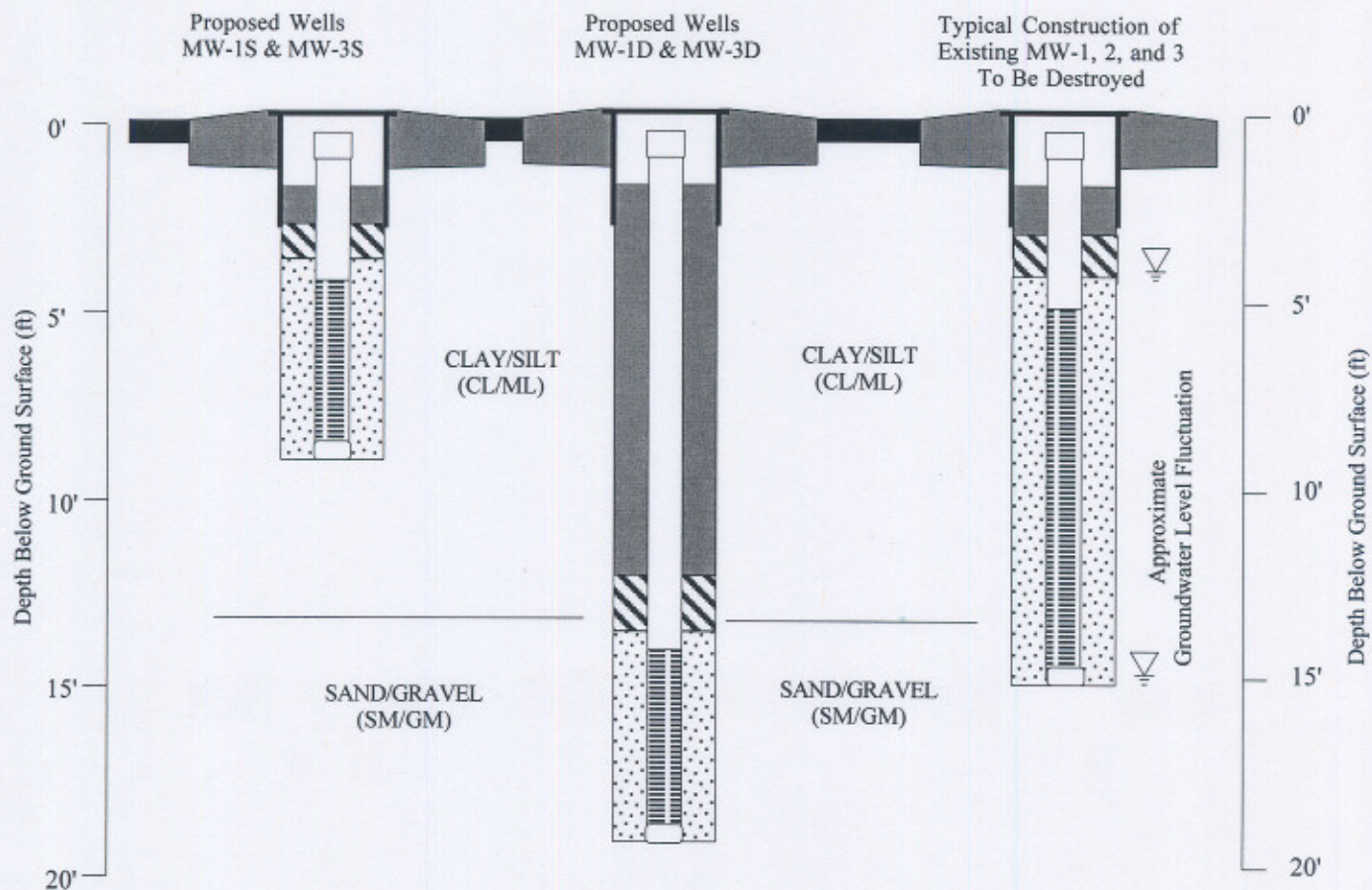
BLUE ROCK
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Project No.
NC-40






Figure Date
11/05

Figure
6





EXPLANATION

- | | | | |
|---|--------------------|---|--|
|  | Neat Cement |  | Sch. 40 PVC 2-inch casing |
|  | Hydrated Bentonite |  | Sch. 40 PVC 2-inch screen (0.01" slot) |
|  | Filterpack | | |

NOT TO SCALE

Proposed Well Construction Details
Former Totem Pole Market
580 South Fortuna Blvd.
Fortuna, CA



BLUE ROCK
ENVIRONMENTAL, INC.

Project No.
NC-40

Report Date
11/05

Figure
7